CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

NABL - Accredited Laboratory as per ISO / IEC-17025 : 2005

Job No.: CTCE/BBMP/W.No.09/KRIDL/WMM/Gradation/2013-14 10.03.2014

GRADATION FOR WMM
MORTH TABLE-400-11

Client : **Asst. Executive Engineer,** Vidyaranyapura Sub Division, BBMP, Bangalore.

Agency : **Technical Manager,** KRIDL, Bangalore.

Name of Work : Improvements and Asphalting to Lakeshore Garden, APC, Hanuman Layout roads in Ward No.09 in Vidyaranyapura Sub Division, BBMP, Bangalore.

Reference : AEE/VSD/PR/445/7/2013-14 Dated: 28.02.2014

Date of Testing : 10.03.2014

Material : WMM

Sample Location : WMM Mix Plant Oven Dry Wt (gm): **25100**

Is Sieve Size in mm	Weight Retained (gm)	Cumulative Weight Retained (gm)	Cumulative % of Retained	Cumulative % of Passing	Spec.Limits
53	0	0	0	100	100
45	935	935	3.7	96.3	95-100
22.4	5500	6435	25.6	74.4	60-80
11.2	5760	12195	48.6	51.4	40-60
4.75	4050	16245	64.7	35.3	25-40
2.36	3890	20135	80.2	19.8	15-30
0.600	2215	22350	89.0	11.0	8-22
0.075	2465	24815	98.9	1.1	0-8

Note:

1. The report shall not be reproduced, except in full, without the written approval of the laboratory.
2. The results indicated above are based on the tests carried out on the samples received in the laboratory.
3. Any Query regarding the report must be reported within 15 days from the date of testing.

Civil-Tech Consultants & Engineers Bangalore

M/s. Civil-Tech Consultants & Engineers
23/14, 7th Cross, 3rd Stage,
4th Block, Shakthiganapathinagara,
Basaveshwaranagar,
Bangalore-560079.

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Job No.: CTCE/BBMP/W.No.09/KRIDL/SDBC/Bitumen/2013-14 19.03.2014

BITUMEN CONTENT AND GRADATION DETERMINATION OF SEMI DENSE BITUMINOUS CONCRETE MIX

AASHTO T 164 & AASHTO T 30

CLIENT	**Asst. Executive Engineer,** Vidyaranyapura Sub Division, BBMP,
AGENCY	**Technical Manager,** KRIDL, Bangalore.
NAME OF THE WORK	Improvements and Asphalting to Lakeshore Garden, APC, Hanuman Layout roads in Ward No.09 in Vidyaranyapura Sub Division, BBMP, Bangalore.
REFERENCE	AEE/VSD/PR/445/7/2013-14 Dated: 28.02.2014
SAMPLE I/D	Asphalting to Lakeshore Garden, APC, Hanuman Layout roads in Ward No.09
DATE OF TESTING	19.03.2014

BITUMEN CONTENT DETERMINATION

Description	Trail 1	Trail 2
1. Weight of Mixture before Test, g	500	500
2. Weight of Mixture after Test, g	473	477
3. Weight of Asphalt and Mineral matter Extracted,	-	-
4. Weight of Mineral Matter, g.	-	-
5. Weight of Ash, g		
6. Weight of Bitumen Extracted, g. (corrected)	27	23.00
7. Bitumen content in %	5.40	4.60
8. Average	**5.00**	

GRADATION AFTER EXTRACTION

SIEVE SIZE	Trail 1				JOBMIX
mm	Weight Retained, gm	% Retained	%Cummulative Retained	% Passing	Gradation
13.2	0	0	0	100	100
9.5	39.45	8.34	8.34	91.66	90-100
4.75	260.5	55.07	63.41	36.59	35-51
2.36	57.86	12.23	75.65	24.35	24-39
1.18	43.85	9.27	84.92	15.08	15-30
0.3	27.85	5.89	90.81	9.19	9-19
0.075	26.42	5.59	96.39	3.61	3-8

SIEVE SIZE	Trail 2				JOBMIX
mm	Weight Retained, gm	% Retained	%Cummulative Retained	% Passing	Gradation
13.2	0	0	0	100	100
9.5	30.45	6.09	6.09	93.91	90-100
4.75	240.3	48.06	54.15	45.85	35-51
2.36	88.87	17.77	71.92	28.08	24-39
1.18	54.76	10.95	82.88	17.12	15-30
0.3	32.96	6.59	89.47	10.53	9-19
0.075	24.85	4.97	94.44	5.56	3-8

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M/s. Civil-Tech Consultants & Engineers
23/14, 7th Cross, 3rd Stage,
4th Block, Shakthi Ganapathi Nagara,
Basaveshwaranagar,
Bangalore-560079.

#23/14, 7th Cross, 3rd Stage, 4th Block, Shakthi Ganapathi Nagara, Basaveshwaranagar, Bangalore-79.
Tele Fax : 23223227, Website : www.civiltechconsultants.com
E-mail : vishwanath.ia@civiltechconsultants.com / info@civiltechconsultants.com